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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,424	09/08/2003	George P. Emerson	EMER-101J	9033
7590 06/28/2004			EXAMINER	
Iandiorio & Teska 260 Bear Hill Road Waltham, MA 02451-1018			LEWIS, AARON J	
			ART UNIT	PAPER NUMBER
			3743	
DATE MAILED: 06/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/657,424

Applicant(s)

EMERSON, GEORGE P.

Examiner

AARON J. LEWIS

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Emerson ('917).

As to claim 1, Emerson (col.1, lines 48-53) discloses an improved insufflation-exsufflation system with percussive assist for removal of broncho-pulmonary secretions comprising: a conduit (11b) for connection to a patient's airway; a pressure source "C" for providing to said conduit alternating positive and negative pressure fluctuations at a first rate corresponding to patient insufflation and exsufflation; and a control mechanism (B) for varying pressure during positive and negative pressure fluctuations at a second higher rate (col.4, lines 23-26) to periodically decrease the positive pressure during positive fluctuations and decrease the negative pressure during negative fluctuations to provide percussive pulses during at least one of insufflation and exsufflation to clear broncho-pulmonary secretions from the patient's airway.

As to claim 2, Emerson discloses the control mechanism includes a valve device (49,51).

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As to claim 3, Emerson (col.4, lines 45-57) discloses the valve device (49,51) vents the positive and negative pressure provided by said pressure source to generate the positive and negative pressure pulses.

As to claim 4, Emerson (col.4, lines 45-53) discloses a flow control device for setting the level of pressure decreases during said pulses.

As to claim 5, Emerson discloses the flow control device includes a restriction mechanism (14 and col.3, lines 5-16).

As to claim 6, Emerson discloses a drive device (B) for controlling the frequency of said second rate.

As to claim 7, Emerson discloses the drive device includes a motor (31) and a motor drive circuit (37,38).

As to claim 8, Emerson (col.4, lines 45-57) discloses the valve has an open position for generating said pressure pulses and a closed position.

As to claim 9, Emerson (col.4, lines 45-57) discloses the valve has a partially closed position (col.4, lines 50-53) for reducing the overall pressure of the pressure fluctuations produced by said pressure source in said conduit and an open position for generating said pressure pulses.

As to claim 10, Emerson discloses a drive circuit (37,38) for controlling at least one of the frequency and stroke of said valve.

### ***Conclusion***

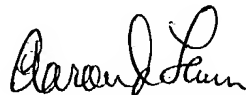
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3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The balance of the art is cited to show relevant mucous removing devices for removing mucous from a patient's respiratory system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (703) 308-0716. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY A. BENNETT can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AARON J. LEWIS  
Primary Examiner  
Art Unit 3743

Aaron J. Lewis  
June 17, 2004